

Abstract

The invention provides a thermoplastic elastomer nonwoven fabric roll that exhibits minimal longitudinal wrinkles and minimal delayed restoration when unrolled, and a method and apparatus for producing the same. Thermoplastic elastomer filaments that have been melt-spun are piled on a belt conveyor thereby forming a sheet of nonwoven fabric, that is guided to a rotating roller disposed above the transportation zone of the belt conveyor and peeled off therefrom. Since minimal tension is applied to the nonwoven fabric during processing, the nonwoven fabric can be unrolled with little stretching by applying relatively little tension to the nonwoven fabric. By the method of this invention, a nonwoven fabric roll with unrolling tension of 0.25 g/cm/basis-weight or less can be formed.